

**REMARKS**

Applicant respectfully requests reconsideration. Claims 1-77 were previously pending in this application with claims 63-77 having been withdrawn from consideration. Independent claim 1 has been amended to include recitations of dependent claims 2 and 3, as well as other minor changes. Independent claim 46 has been amended to include the recitation of dependent claims 54 and 55, amongst other recitations. Independent claim 57 has been amended to include the recitation of dependent claim 60. Claims 2, 3, 54, 55 and 60 have been cancelled. The dependencies of claims 56 and 62 were amended. The specification was amended to correct a typographical error. Claims 78 and 79 were added. No new matter has been added. Claims 1, 4-53, 56-59, 61-62 and 78-79 are pending for examination, with claims 1, 46, and 57 being independent claims.

**Amendment to Specification**

The sealing surface was incorrectly identified as “92” in the paragraph beginning on page 14, line 21 of the specification. The specification has been amended to correctly identify the sealing surface as “94”.

**Rejection of Claims 1, 4-39, 42-44, 46-53, and 55-56**

Claims 1, 4-39, 42-44, 46-53, and 55-56 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,211,523 (Hunerberg). Applicant respectfully traverses this rejection.

Independent claim 1 has been amended to include recitations of dependent claims 2 and 3 which do not stand rejected in view of Hunerberg. Specifically, amended claim 1 recites that the polymer processing apparatus includes a screw mounted in a barrel that is designed to reciprocate from an accumulation position, in which the screw plasticates polymeric material that accumulates downstream of the screw, and an injection position, in which the screw does not plasticate polymeric material and the accumulated polymeric material is injected through an outlet of the barrel. Claim 1 has also been amended to recite that the flow controlling system is designed to direct blowing agent flow from the source through the bypassing passageway when the screw is in the injection position. Hunerberg fails to teach or suggest a system including

these features. Thus, independent claim 1 is patentable over Hunerberg. Claims 4-39 and 42-44 depend from claim 1 and, therefore, are also patentable over Hunerberg for at least these reasons.

Independent claim 46 has been amended to include the recitation of dependent claim 54, which does not stand rejected in view of Hunerberg. Specifically, amended claim 46 recites that the port in the barrel comprises a plurality of orifices. Amended claim 46 also recites that the system includes a blowing agent injection assembly that includes a shut-off valve positioned within a sleeve defining the port that comprises the plurality of orifices. Hunerberg fails to teach or suggest a system including these features. Thus, independent claim 46 is patentable over Hunerberg for at least these reasons. Claims 47-53 and 56 depend from claim 46 and, therefore, are also patentable over Hunerberg for at least this reason. Claim 55 has been cancelled.

Accordingly, Applicant respectfully requests withdrawal of the rejection on this ground.

Rejection of Claims 40-41, and 45

Claims 40-41 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunerberg. Applicant respectfully traverses this rejection.

Claims 40-41 and 45 depend from claim 1 which, as amended, is patentable over Hunerberg for reasons noted above. Therefore, these claims are also patentable over Hunerberg for at least these reasons.

Accordingly, Applicant respectfully requests withdrawal of the rejection on this ground.

Rejection of Claims 2-3

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunerberg in view of U.S. Patent No. 6,322,347 (Xu). Applicant respectfully traverses this rejection.

Claim 1 was amended to include recitations of claims 2 and 3, and claims 2 and 3 were cancelled. Thus, Applicant is addressing this rejection in connection with claim 1. Xu issued on November 27, 2001, while this application was filed on February 13, 2001 claiming priority to March 9, 2000. Thus, Xu is prior art to this application under 35 U.S.C. 102(e). Furthermore, Xu and this application were commonly owned by Trexel at the time the invention claimed in this application was made. Therefore, Xu cannot properly be used in a §103 rejection for this

application. Thus, amended claim 1 is patentable over the combination of Hunerberg in view of Xu for at least this reason.

Accordingly, Applicant respectfully requests withdrawal of the rejection on this ground.

Rejection of Claims 54 and 57-62

Claims 54 and 57-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunerberg and further in view of U.S. Patent No. 6,376,059 (Anderson). Applicant respectfully traverses this rejection.

Claim 46 was amended to include the recitation of claim 54 (and claim 56), and claim 54 was cancelled. Thus, Applicant is addressing this rejection in connection with claim 46.

Anderson issued on April 23, 2002, while this application was filed on February 13, 2001 claiming priority to March 9, 2000. Thus, Anderson is prior art to this application under 35 U.S.C. 102(e). Furthermore, Anderson and this application were commonly owned by Trexel at the time the invention claimed in this application was made. Therefore, Anderson cannot properly be used in a §103 rejection for this application. Thus, amended independent claims 46 and 57 are patentable over the combination of Hunerberg in view of Anderson for at least this reason.

Moreover, even if Hunerberg was combined with Anderson as stated in the Office Action, each limitation of amended independent claim 46 is not met by this combination. The combination fails to teach or suggest the claimed blowing agent injection assembly that includes a shut-off valve positioned within a sleeve defining a port comprising a plurality of orifices to introduce blowing agent into polymeric material. Though Hunerberg discloses a shut-off valve and Hunerberg discloses a multi-orifice port, there is no suggestion in either reference (or, elsewhere in the prior art) regarding combining these features in a blowing agent injection assembly structure as claimed. Because each limitation of amended claim 46 is not taught or suggested in the proposed combination, a prima facie case of obviousness has not been met. Therefore, independent claim 46, and its dependents claims, are patentable over the combination.

Similarly, even if Hunerberg was combined with Anderson as stated in the Office Action, each limitation of amended independent claim 57 is not met by this combination. The combination fails to teach or suggest the claimed blowing agent injection assembly that includes

a valve coupled to a passageway and positioned within a sleeve defining a multi-orifice outlet. As noted above, though Hunerberg discloses a shut-off valve and Hunerberg discloses a multi-orifice port, there is no suggestion in either reference (or, elsewhere in the prior art) regarding combining these features in a blowing agent injection assembly structure as claimed. Because each limitation of amended claim 57 is not taught or suggested in the combination, a prima facie case of obviousness has not been met. Therefore, independent claim 57, and its dependents claims, are patentable over the combination.

Accordingly, for at least these reasons, Applicant respectfully requests withdrawal of the rejection on this ground.

New Claims

New claims 78 and 79 respectively depend from claims 46 and 62. These claims are patentable over the cited references for at least the reasons noted above that claims 46 and 62 are patentable.

**CONCLUSION**

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,

By:

  
\_\_\_\_\_  
Robert H. Walat, Reg. No. 46,324  
Timothy J. Oyer, Ph.D., Reg. No. 36,628  
Wolf, Greenfield & Sacks, P.C.  
600 Atlantic Avenue  
Boston, Massachusetts 02210-2206  
Telephone: (617) 646-8000

Docket No.: T0428.70119US00  
Date: November 23, 2004  
x11/25/04x